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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,842	02-08/2002	Yasuhito Aruga	111934	9647
25944	7590	10/02/2003	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			PARKER, KENNETH	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/067,842

Applicant(s)

ARUGA, YASUHIITO

Examiner

Kenneth A Parker

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a) in no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 3, 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-2, 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitawada et al 06-289415.**

Kitawada et al shows the elements of claim 1 including an electro-optical device comprising: a substrate 301 carrying an electro-optical material (illustrated as twisted molecules); a first wiring 318 formed on the surface of the substrate; an insulating layer 319 covering the first wiring, the insulating layer being formed on the surface of the substrate; and a second wiring 305 formed over a first region of the insulating layer including a region overlapping a region in which the electro-optical material is formed (the portion on the left side of the seal 303) and a second region which corresponds to the remaining region other than the first region of the insulating layer (any other portion, such as the portion under the seal), the second wiring being connected to the first wiring via a contact hole (illustrated but unlabeled) formed within the first region of the insulating layer.

Kitawada et al further shows the device of claim 2 having a counter substrate, with the electro-optical material sandwiched between the substrate and the counter substrate (302), and a sealing material disposed between the substrate and the counter substrate, wherein the first region includes a region of the insulating layer which faces the sealing material. Here the first region has been redefined to include the portion under the seal. So the part of 305 that corresponds to the second region in the part that protrudes from under the seal on the left side.

The device is an apparatus. The pixel electrode layer 314 is the layer employed for 305, which is the ITO (a conductive oxide ) layer (see abstract).

**Claims 1-2, 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Komeno et al JP 2000-194013.**

The ITO layer crossing into the liquid crystal region and connecting a lower electrode through a hole (see cover figure), though insulator 48. Therefore, these claims are anticipated by the reference.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2, 4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa et al 5636329 in view of Inada et al 5608559.**

Sukegawa et al shows an ITO layer connected through an insulator contact holes to a lower metal layer in the terminal portion of the display (therefore the mounting region). Lacking is the use of COG devices, flexible circuits, or the opposite substrate with the electrooptical material in the middle. An opposite substrate and electrooptic material was inherent to any liquid crystal device (liquid crystal is electrooptic, and without an opposite substrate the liquid crystal would spill on the ground).

COG (chip on glass) with the integrated circuit (electronic component) located as claim with was well known for low cost manufacturing and high resolution capability (the well known status is evidence by Sukegawa, which shows such a configuration as prior art in figure 4). Therefore it would have been obvious, to one of ordinary skill, to employ an electronic component as claimed as was well known for the benefit low cost and high resolution.

**Claims 1-2, 4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komeno et al JP 2000-194013 in view of Inada et a 5608559.**

Lacking is the use of COG devices, flexible circuits, or the lower electrodes being of an elemental metal. It was notoriously well known to employ aluminum or tantalum for low cost and good conductivity. Therefore it would have been obvious to one of

ordinary skill to use aluminum or tantalum which was conventionally for the benefit of low cost and high conductivity.

COG (chip on glass) with the integrated circuit located as claim with was well known for low cost manufacturing and high resolution capability (the well known status is evidence by Sukegawa, which shows such a configuration as prior art in figure 4). Therefore it would have been obvious, to one of ordinary skill, to employ an electronic component as claimed as was well known for the benefit low cost and high resolution.

***Allowable Subject Matter***

**Claims 3, 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

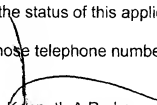
***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 703-305-6202. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.



Kenneth A Parker  
Primary Examiner  
Art Unit 2871